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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,485

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Eun-Gi Son

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EXAMINER

JACOBS, TODD D

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

03/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,485	<b>Applicant(s)</b> SON, EUN-GI	
	<b>Examiner</b> TODD D. JACOBS	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

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## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 8 objected to because of the following informalities: line 15 states “the an inner” and should state “an inner”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8, 3, 5, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kishibuchi et al (5,683,299).
4. In re claim 8, Kishibuchi discloses a clutchless compressor comprising:
  - a. a pulley (1) adapted to be rotatably driven about an axis by an engine.
  - b. a rotatable drive arrangement between the pulley and a rotary shaft of the compressor, the rotatable drive arrangement including a connector member (11, 13, 7, 6, 4 and the flange between (1) and (4) that connects the two by welding and best shown in Fig. 1) and a disk plate (9) for rotatably driving the compressor rotary shaft during normal operation of the compressor; the connector member including a coupling portion (11, 6) connected to the disk plate during normal operation of the compressor by a frangible portion (7, 13) of the connector member; the frangible portion being between the coupling portion and a remaining portion of the connector member (4, flange); the coupling portion being axially displaced from the frangible portion and the remaining portion of the connector member; the frangible portion, coupling portion, disk plate and

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remaining portion being arranged so that in response to a torque applied to the frangible member exceeding a threshold the frangible portion breaks and the disk plate is not driven by the pulley or the connector member; the remaining portion of the connector member including an insert (4) fixed to an inner peripheral surface of the pulley and a bearing fixed to the inner peripheral surface of the insert.

5. In re claim 3, Kishibuchi discloses the clutchless compressor wherein the coupling portion has plural projections projecting radially from peripheral portions of the coupling portion (bolt and fastener 12 are the projections, note that being in 3D space, this projects in radial, axial, etc directions), and the disk plate has coupling recesses formed in a face opposite to the pulley (holes that the projections go through on the disk plate are the recesses; note that these recesses are formed on the left most face as shown on Fig. 1 which is opposite to the pulley) that correspond with the projections, whereby the projections project into the coupling recesses to connect the disk plate with the connector member during normal operation of the compressor.

6. In re claim 5, Kishibuchi discloses the clutchless compressor wherein the connector member includes: a flange (as stated before, the piece that is welded to (4) and is between (4) and (1) as shown in Fig. 1) connected with the insert portion and seated on a portion of the pulley facing toward the disk plate (the flange is seated on the inside of the pulley which faces the disk plate), the frangible portion connecting the flange with the coupling portion during normal operation of the compressor.

7. In re claim 6, Kishibuchi discloses the clutchless compressor wherein a face of the coupling portion opposite to the disk plate includes plural connecting slots extending in a circumferential direction (the slots/openings on this side extend in both the radial and circumferential directions), the disk plate including plural connecting projections in a face thereof opposite to the pulley (projections 12; these projections go through the face on the leftmost side

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as shown in Fig. 1 which is opposite to the pulley), the plural connecting projections corresponding with and projecting radially and axially into the plural the connecting slots.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishibuchi in view of Sterka (5,303,896).

10. In re claims 4 and 7, Kishibuchi fails to disclose dampers between the projections and the coupling recesses, wherein the damper extends into the connecting slots.

11. Nevertheless, Sterka discloses elastomer grommets (22) that are inside of the recesses/holes (18) and outside of the projections (40). This allows for less severe movements of the system which results in a longer life of the apparatus.

12. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Kishibuchi in view of Sterka in order to add the dampers of Sterka to the compressor of Kishibuchi in order to increase the life of the compressor.

***Response to Amendment***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

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***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TODD D. JACOBS whose telephone number is 571-270-5708. The examiner can normally be reached on Monday - Friday, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/  
Supervisory Patent Examiner, Art Unit  
3746

/TODD D. JACOBS/  
Examiner, Art Unit 3746